



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/331,501	09/27/1999	Ole Mathiassen	196-1187	1749

7590 09/11/2002

Lee Mann Smith McWilliams
Sweeney & Ohlson
PO Box 2786
Chicago, IL 60690-2786

EXAMINER

LAM, THANH

ART UNIT PAPER NUMBER

2834

DATE MAILED: 09/11/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/331,501

Applicant(s)
Mathiassen

Examiner
Thanh Lam

Art Unit
2834



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Amndt. filed on 6/14/2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-36 and 38-40 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21-23, 26-36, and 38-40 is/are rejected.
- 7) ☒ Claim(s) 24 and 25 is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 6) ☐ Other:

Art Unit: 2834

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 35-36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 35, the limitation "the core substantially parallel to an outer side of the stator" is not clear that which portion of the core is parallel to what portion of the "one of the outer sides of the stator." Clarify is required.

Regarding claim 36, the limitation "the core is offset inwardly from the outer side" is not clear that which portion of the core is offset from what part of the "the outer side." Clarify is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

Art Unit: 2834

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 21-23, 26-36, and 38-40 are rejected under 35 U.S.C. 102(b) as being anticipated by McCarty (4,656,379)

McCarty discloses an electric motor comprising a stator (22) having a bore in which a rotor (20) is located, and having a control arrangement connected to the motor, the control arrangement having at least one coil (40) with a core (42), the coil being located in an intermediate circuit (Fc, fig. 6 and col. 5, line 5-11) of the control arrangement and being loaded by D.C current of the motor (col. 5, lines 6-9), the core of the coil being located on the stator, and the stator comprising iron (col. 6, lines 67), the iron being used for a magnetic circuit for the coil (col. 6, lines 62-67).

Regarding claim 22, McCarty discloses the core is a part of the stator.

Regarding claim 23, McCarty discloses a flux restriction (col. 4, lines 62 and col. 5, lines 1-5) separates the magnetic flux of the coil on one side and magnetic flux of the stator on the other side.

Regarding claim 26, McCarty discloses the core only extends over a part of the axial length of the stator.

Regarding claim 32, McCarty discloses the core is substantially oriented in a radial direction.

Regarding claim 33, McCarty discloses the core is located in volume (where the core 42 occupied in the stator) in the stator, which volume is closed by a cover (41).

Art Unit: 2834

Regarding claim 35, McCarty discloses the stator has longitudinal outer sides, and the core of the control arrangement is substantially parallel to one of the outer sides of the stator.

Regarding claim 36, McCarty discloses the core of the control arrangement is offset inwardly from the outer side.

Regarding claim 38, McCarty discloses the motor including several coils, each coil having its own core (coil 40 having core 42 and coil 30 having core 24).

Regarding claim 39, McCarty discloses at least two the coils are part coils of a function coil from the intermediary circuit coil (40) or a motor coil (30).

Regarding claim 40, McCarty discloses the motor in which the coils are at least two different function coils from the intermediary circuit coil (40) or a motor coil (30).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 28-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over McCarty in view of Padoan.

McCarty disclose every aspect of claimed invention except for the core are formed with laminated sheets plates.

Art Unit: 2834

Padoam discloses a core is formed with laminated sheet plates (19').

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the core of McCarty and replace the core formed with laminated sheets as taught by Padoam in order to provide the core with ease to assembly.

Regarding claim 29, McCarty discloses the stator (24) is formed with imitated sheets (34).

Regarding claim 30, it is noted that Padoan discloses a motor in an axial direction (X) of the stator consist of at least two different types of laminated sheet plates (5' and 19') having different shapes, of which one has no core (5') forming area.

4. Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over McCarty in view of Steiner.

McCarty disclose every aspect of claimed invention except for the coil is fitted on a coil carrier shaped to be pushed onto the core.

Steiner discloses the coil (33) is fitted on a coil carrier (31) shaped to be pushed onto the core (25).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the core and coil of McCarty and replace the coil carrier as taught by Steiner in order to improve the core assembly.

Art Unit: 2834

Allowable Subject Matter

5. Claims 24-25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claims 24-25, none of the cited arts disclose the flux restriction comprises one hold in the stator, the hold is filled with a non magnetically conducting material, and including a cooling medium.

Response to Arguments

6. Applicant's arguments filed 6/14/2002 have been fully considered but they are not persuasive.

In response to applicant's argument that McCarty patent does not disclose a core for the control coil. The examiner submits that the bobbin 42 is the core for carrying the d.c current control coil 40 (see col. 5, lines 6-11).

Regarding argument respect to the term "intermediate circuit" fail to disclose by McCarty patent. As clearly addressed in previous rejection action, The examiner submits that the term "intermediate circuit" can be understood as a sub-circuit located in between of the main circuit. Therefore, the circuit Fc is the intermediate circuit (Fc, fig. 6 and col. 5, line 5-11).

Art Unit: 2834

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh Lam whose telephone number is (703) 308-7626. The fax phone number for this Group is (703) 305-3431.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0656.



Thanh Lam

Patent Examiner

Sept. 6, 2002



**TRAN NGUYEN
PRIMARY EXAMINER**